UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,642	01/03/2001	Paul J. Rank	0007056-0055	7532

26263   7590   08/30/2004

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EXAMINER
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ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/756,642	RANK ET AL.
	Examiner	Art Unit	
	Nathan Hillery	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   **Office Action Summary**   Part of Paper No./Mail Date 20040823

DETAILED ACTION

1.   This action is responsive to communications: Amendment filed on 5/25/04.

2.   Claims 1 – 44 are pending in the case. Claims 1, 12, 23, and 34 are

independent.

3.   The objection to the Specification has been withdrawn as necessitated by

amendment.

4.   The rejection of claims 1 – 44 under 35 U.S.C. 103(a) as being

unpatentable has been maintained.

Claim Rejections - 35 USC § 103

5.   The text of those sections of Title 35, U.S. Code not included in this action

can be found in a prior Office action.

6.   Claims 1 – 44 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Young et al. (US005280575A).

7.   **Regarding independent claim 1**, Young et al. discloses an invention that

provides a new and improved data structure for storing data relating to, for

example, tables and similar items. Young et al. do not explicitly teach **storing on**

a first record property data of said spreadsheet file; storing on a second

record access data of said spreadsheet file; storing on a third record

spreadsheet cell data for a plurality of spreadsheet cells. However, Young et

al. do teach that *FIGS. 1 through 5D depict, at various level of detail, a tabular*

data structure in accordance with the invention. With reference to FIG. 1, a

tabular data structure 10 includes three primary portions, including a descriptor

portion 11, a header portion 12 and a table contents portion 13. As will be

described in greater detail below in connection with FIGS. 5A through 5C, the

table contents portion 13 contains, in one or more data structures each

representing a table, data representing a table, which comprises an array of

cells. Tabular data may be generated by, for example, a spreadsheet program in

which data organized in the form of an array of, generally, two or more

dimensions. The data stored in cells in a table may comprise literal data, that is,

data representing input by an operator or other source, or it may comprise data

representing a formula which defines a cell value in terms of an arithmetic

expression with reference to other cells in the table. Alternatively, as described

below, data for a cell may be represented or provided by a source external to the

tabular data structure 10 (Column 1, line 66 – Column 2, line 18). It would have

been obvious to one of ordinary skill in the art at the time of invention to be

motivated to store the property, access, and cell data each in its own record or

space because the invention of Young et al. would process the actions of its

users faster if the similar information were all grouped in the same area than if

the similar information were stored in various locations especially when the users

are implementing the invention of Young et al. on systems with limited process

speed.

8.   **Regarding dependent claim 2**, Young et al. teach that *in a refinement,*

each row in the data structure includes a row header including, implicitly or

explicitly, a row number and at least zero or more cells, the row number

identifying a row in a table for the cell (Column 1, lines 39 – 43), which provide

that **said property data includes the number of rows and cells in said spreadsheet file**.

9.   **Regarding dependent claims 3 and 4**, Young et al. teach that *the descriptor portion 11 includes a plurality of fields, including a format version identification field 14 that identifies a format version for the tabular data structure 10* (Column 2, lines 19 – 22) and that *in addition, the header portion 12 includes a title field 21 which contains a title for the tabular data structure 10 and a data field 22 which contains a date identifying when the tabular data structure was created or last modified or updated* (Column 2, lines 43 – 48), which provide that **said property data includes the name and version of the spreadsheet file** and **said property data includes date information of said spreadsheet file**.

10.   **Regarding dependent claim 5**, Young et al. teach that *the table metadata field 64 may also contain a default formats field 74 which contains default formats for the rows and columns comprising the table defined by table definition 59* (Column 6, lines 40 – 43), which provide that **said property data includes default data formatting information**.

11.   **Regarding dependent claim 6**, Young et al. teach that *the table header portion 60 may include fields 61 and 62 which may contain values identifying, respectively, the maximum number of columns and rows which the table may contain* (Column 5, line 67 – Column 6, line 3), which provide that **said access data includes the number of columns of said spreadsheet file accessed by said second record**.

12.   **Regarding dependent claim 7**, Young et al. teach that *as a further*

refinement, each cell includes a header portion and a value portion, the header

portion containing a cell number identifying a column in a table for the cell

(Column 1, lines 43 – 46), which provide that **said access data includes cell**

IDs of cells in said columns accessed by said second record.

13.   **Regarding dependent claim 8**, Young et al. teach that *the table contents*

portion 13 includes one or more table definitions each of which may, in turn,

include a metadata portion, which, in turn, includes column entries each of which

contains information regarding processing and display of a specific column of

data in the table (Column 3, lines 43 – 48), which provide that **a plurality of**

records storing access data, wherein each of said plurality of records

storing access data accesses a subset of columns of said spreadsheet file.

14.   **Regarding dependent claim 9**, Young et al. do not explicitly teach that

said cell data includes the number of cells stored in said third record.

However, Young et al. do teach that *the table contents portion 13 contains, in*

one or more data structures each representing a table, data representing a table,

which comprises an array of cells (Column 2, lines 4 – 7). It would have been

obvious to one of ordinary skill in the art at the time of the invention to be

motivated to store the number of cells because the invention of Young et al. uses

an array to hold the cells and the skilled artisan would want to keep track of the

number of elements in an array for memory conservation.

15.   **Regarding dependent claim 10**, Young et al. teach that *a cell 91*

includes ... a cell value/expression field 97, which contains the literal value for

the cell, and/or an expression by which the value for the cell can be computed (Column 8, lines 15 – 20), which provide that **said cell data includes the data values stored in cells stored in said third record**.

16.   **Regarding dependent claim 11**, Young et al. teach that *the table contents portion 13 contains, in one or more data structures each representing a table, data representing a table, which comprises an array of cells* (Column 2, lines 4 – 7), which provide for **a plurality of records storing cell data, each of said plurality of records storing cell data storing a subset of the cells of said spreadsheet file**.

17.   **Regarding independent claim 12**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

18.   **Regarding dependent claim 13**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

19.   **Regarding dependent claim 14**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

20.   **Regarding dependent claim 15**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.

21.   **Regarding dependent claim 16**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

22.   **Regarding dependent claim 17**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

23.   **Regarding dependent claim 18**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

24.   **Regarding dependent claim 19**, the claim incorporates substantially

similar subject matter as claim 8, and is rejected along the same rationale.

25.   **Regarding dependent claim 20**, the claim incorporates substantially

similar subject matter as claim 9, and is rejected along the same rationale.

26.   **Regarding dependent claim 21**, the claim incorporates substantially

similar subject matter as claim 10, and is rejected along the same rationale.

27.   **Regarding dependent claim 22**, the claim incorporates substantially

similar subject matter as claim 11, and is rejected along the same rationale.

28.   **Regarding independent claim 23**, the claim incorporates substantially

similar subject matter as claim 1, and is rejected along the same rationale.

29.   **Regarding dependent claim 24**, the claim incorporates substantially

similar subject matter as claim 2, and is rejected along the same rationale.

30.   **Regarding dependent claim 25**, the claim incorporates substantially

similar subject matter as claim 3, and is rejected along the same rationale.

31.   **Regarding dependent claim 26**, the claim incorporates substantially

similar subject matter as claim 4, and is rejected along the same rationale.

32.   **Regarding dependent claim 27**, the claim incorporates substantially

similar subject matter as claim 5, and is rejected along the same rationale.

33.   **Regarding dependent claim 28**, the claim incorporates substantially

similar subject matter as claim 6, and is rejected along the same rationale.

34.   **Regarding dependent claim 29**, the claim incorporates substantially

similar subject matter as claim 7, and is rejected along the same rationale.

35. **Regarding dependent claim 30**, the claim incorporates substantially similar subject matter as claim 8, and is rejected along the same rationale.

36. **Regarding dependent claim 31**, the claim incorporates substantially similar subject matter as claim 9, and is rejected along the same rationale.

37. **Regarding dependent claim 32**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.

38. **Regarding dependent claim 33**, the claim incorporates substantially similar subject matter as claim 11, and is rejected along the same rationale.

39. **Regarding independent claim 34**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

40. **Regarding dependent claim 35**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

41. **Regarding dependent claim 36**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

42. **Regarding dependent claim 37**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.

43. **Regarding dependent claim 38**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

44. **Regarding dependent claim 39**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

45. **Regarding dependent claim 40**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

46.   **Regarding dependent claim 41**, the claim incorporates substantially similar subject matter as claim 8, and is rejected along the same rationale.

47.   **Regarding dependent claim 42**, the claim incorporates substantially similar subject matter as claim 9, and is rejected along the same rationale.

48.   **Regarding dependent claim 43**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.

49.   **Regarding dependent claim 44**, the claim incorporates substantially similar subject matter as claim 11, and is rejected along the same rationale.

Response to Arguments

50.   Applicant's arguments filed 5/25/04 have been fully considered but they are not persuasive.

51.   In response to Applicant's arguments that the claimed invention specifically claim 1 is unobvious over Young et al. (p 10, 1st paragraph), it should be noted that claim 1 merely recites storing information into a record of memory. Further, the Office asserts that the skilled artisan would have known of various methods of storing information in separate areas within memory. The Office is aware that the Applicant may not mean to claim the broad interpretation used in the rejection; however, the broad interpretation used is still within the scope of the invention as claimed.

Conclusion

52.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Nathan Hillery whose telephone number is

(703) 305-4502. The examiner can normally be reached on M - F, 8:30 a.m. -

5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The

fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

NH

SANJIV SHAH
PRIMARY EXAMINER